In our own day, Mrs. Ayrton (Hertha Marks) made her scientific reputation with her researches into the electrical arc, going on from this to elucidate various problems connected with the search-light. (During the war of 1914-18, she invented an anti-gas fan which was used to some effect.) The great humanitarian, Lewis Gompertz, devised the expanding chuck, still widely used in industry, from which a more practically-minded person might have made a fortune. This was one only of his thirty-eight inventions—mostly designed, it may be added, for the purpose of rendering the lives of dumb animals more bearable.

§vni

Jewish interest in natural history and allied branches of science goes back to a remote period. When in the tenth century a copy of Dioscorides' work on Botany reached Cordova, it was the Jewish physician, Hasdai ibn Shaprut, who turned it into Arabic, with the aid of a Byzantine monk. It was thus that the work of the great Greek scientist became available to the Spanish schools, and ultimately to mediaeval Europe as a whole. This was typical of the share of the Jews in spreading mediaeval science.

Mention is made elsewhere (pp. 200-1), in connexion with his vastly important medical work, of the Marrano physician, Garcia d'Orta, founder of tropical medicine. But his famous *Colloquies* (first published at Goa in 1563) marked an epoch, too, in the history of botany; for it has the

earliest scientific description of a large number of plants, and is the first work that treats a flora different from that of the classical writers—Dioscorides, Theophrastus, and so on. D'Orta's botanical work was further developed by another Marrano scholar and traveller, Ghristoval Acosta, whose *Treatise on the Drugs and Medicines of India*